

25X1

5 May 1955

MEMORANDUM FOR THE FILES

SUBJECT: Telephone Conversations with Dr. Roderic Scott

I called Dr. Scott on 2 May and discussed with him the Perkin-Elmer quotation dated 28 April 1955. I pointed out for him that I could not understand the great increase in costs reflected by this quotation over the earlier quotations received from Perkin-Elmer and particularly pointed out that the cost of the computers, the periscopes and the charting cameras appeared to be out of line; that too high a profit was attached to purchase of materials; and that we would not understand an item covering the cost of project integration services in view of the G&A and profit allowances claimed by Perkin-Elmer on the Hycon subcontract. I detailed for Dr. Scott each of the items I questioned and asked that he review the situation and advise us at the earliest possible date so that we could either conclude our negotiations in a firm contract or seek accomplishment of the project requirements in other ways. Scott professed ignorance on some of the items mentioned. He offered an explanation of a few of the costs which could now be based on prices quoted by priorities of materials but he promised to reexamine the entire quotation and call me on 3 May 1955.

At 10:15 p.m. on 3 May Dr. Scott contacted the Watch Officer and asked him to have me call him at home in Stamford. This I did. Dr. Scott informed me at this time that after reexamination of the entire proposal he had come to the conclusion that the proposal was seriously in error. He requested that we return bills submitted by Perkin-Elmer which were apparently based upon this proposal and asked if I thought that a total cost of \$5.44 million was approaching the figure we had in mind for the photographic equipment involved. I told Dr. Scott that this was far better than the original quotation and was approaching the target we contemplated. I stated to him, however, that we were sending a letter to [redacted] in which we pointed out that for reasons unknown to us, Perkin-Elmer had increased their prices to such an extent that we considered splitting the contracts and administering each ourselves and, furthermore, that ~~which~~ the uncertainty created by the latest quotation, we thought a fully redeterminable type contract in which the fee was fixed upon completion of performance appeared warranted. Dr. Scott stated that he had calculated all of the costs involved in the Perkin-Elmer side of the contract and was firmly convinced that the 28 April quotation was seriously in error. He added, however, that he had not yet had an opportunity to discuss these errors with P-E management. He stated he would attempt to accomplish this at the earliest possible moment and would inform us of the results of his efforts.

25X1

25X1

Orig - OCTROI MASTER
CC - OCTROI Service
cc - chrono

TS 103557
Copy 1 of 3

SPO NO.	ITEM NO.	DESCRIPTION	UNIT SELLING PRICE	ITEM SELLING PRICE
24033	1	Purchase of services, engineering and test facilities for the purpose of investigating the strength of glass prior to the purchasing of material, tooling and fabrication of the windows as described in Items 2 thru 10		\$4,200.
		Delivery - April 1, 1955		
	2	Purchase of BSC glass and tooling for the manufacture of 169 windows outlined in items 3 thru 10		68,821.
		Delivery - May 30, 1955		
	3	Fabricate 66 windows 7.30" x 8.84" for use with Configurations A1 and A2	136.33	8,998.
		Delivery - 4 6/1/55 12 10/1/55 2 7/1/55 12 11/1/55 6 8/1/55 12 12/1/55 12 9/1/55 6 1/1/56		
	4	Fabricate 33 windows 8.02" x 8.70" for use with Configurations A1 and A2	136.84	4,519.
		Delivery - 2 6/1/55 6 10/1/55 1 7/1/55 6 11/1/55 3 8/1/55 6 12/1/55 6 9/1/55 3 1/1/56		
	5	Fabricate 7 windows 6.00" x 6.60" for use with Configuration B	139.60	977.
		Delivery - 1 8/15/55 1 12/1/55 1 10/1/55 1 1/1/56 1 11/1/55 2 2/1/56		
	6	Fabricate 14 windows 7.40" in diameter for use with Configuration B	139.60	1,954.
		Delivery - 2 8/15/55 2 12/1/55 2 10/1/55 2 1/1/56 2 11/1/55 4 2/1/56		
	7	Fabricate 14 windows 7.90" in diameter for use with Configuration B	139.60	1,954.
		Delivery - 2 8/15/55 2 12/1/55 2 10/1/55 2 1/1/56 2 11/1/55 4 2/1/56		

25X1

CONFIDENTIAL
COMPARISON INFORMATION

SPO NO.	ITEM NO.	DESCRIPTION	UNIT SELLING PRICE	ITEM SELLING PRICE
24033	8	Fabricate 14 windows 8.68" x 9.00" for use with Configuration B	139.60	\$1,954.
		Delivery - 2 8/15/55 2 12/1/55 2 10/1/55 2 1/1/56 2 11/1/55 4 2/1/56		
	9	Fabricate 14 windows 30" in diameter x 1" thick for use with Configuration C	1,129.00	15,807.
		Delivery - To be determined		
	10	Fabricate 7 windows 30" in diameter x 1" thick for use with Configuration C	1,027.00	7,197.
		Delivery - To be determined		
24136	1	Provide engineering services to develop a preliminary design layout of a Data Recording Camera described on Projector Division Technical Specification #2, 1/19/55 and Amendment #1 4/4/55		44,296.
		Delivery - April 30, 1955		
	2	Provide engineering services to develop an advanced design layout of a Data Recording Camera		40,499.
		Delivery - May 30, 1955		
	3	Fabricate, test and delivery a prototype Data Recording Camera designed & developed under Items 1 & 2		34,804.
		Delivery - June 30, 1955		
	4	Assembly and necessary rework of first production unit of a Data Recording Camera		34,804.
		Delivery - July 30, 1955		
	5	Test, evaluate and delivery of the first production unit of a Data Recording Camera		12,656.
		Delivery - August 30, 1955		
	6	Provide a complete set of engineering drawings for the manufacture of a Data Recording Camera		6,328.
		Delivery - September 30, 1955		

SPO NO.	UNIT NO.	DESCRIPTION	UNIT SELLING PRICE	ITEM SELLING PRICE
24136 (cont)	7	Fabricate, test and deliver 19 Data Recording Cameras similar to prototype developed under Item 3 but modified as indicated by the results of the prototype tests	11,718.36	222,649.
		Delivery - 1 9/15/55 1 10/5/55 1 11/22/55 1 12/23/55 1 per week after 1/1/56 until total of 15 delivered		
	8	Provide spare parts, service and operating instructions in 4 kits, each kit containing sufficient spare parts for 5 Data Recording Cameras	1,740.23	6,961.
		Delivery - 1 8/30/55 1 2/3/56 1 1/6/56 1 3/9/56		
24211	1	Provide engineering services to design and develop an image evaluation device as described in Peco Engineering Report #361		14,555.
		Delivery - April 15, 1955		
	2	Provide a technical report describing the operation and performance of the image evaluation device developed under Item 1		1,898.
		Delivery - May 1, 1955		
24257	1	Purchase the consulting services of Dr. J.G.Baker for systems engineering required for the successful performance of the program at the rate of \$30. per hour plus expenses		43,500.
		Delivery - To be billed monthly		
	2	Purchase of the services of the Spica Corp. to provide the optical design of the equipment required for the satisfactory performance of this program. This optical design will include specifications of glass types, surface curves, thickness & separation of elements, expected performance, resolutions & curvatures of field		16,000.
		Delivery - April 30, 1955 July 30, 1955		
24293	1	Provide the necessary engineering services to design and develop a 36" f/10 lens as described in Projector Division Technical Specification #4 2/10/55		6,744.
		Delivery July 1, 1955		

SPO NO.	ITEM NO.	DESCRIPTION	UNIT SELLING PRICE	ITEM SELLING PRICE
24293 (cont)	2	Fabricate, test and deliver a prototype of the 36" f/10 lens designed under Item 1 Delivery - July 1, 1955		10,166.
	3	Purchase the necessary material & tooling, both optical & mechanical, required for the fabrication of 6 36" f/10 lenses Delivery June 1, 1955		47,102.
	4	Fabricate, test & deliver 6 36" f/10 lenses similar to the prototype built under Item 1 but modified if necessary as indicated by the results of the proto- type tests Delivery - 1 October 6, 1955 Balance at rate of 1 per month starting November 1, 1955	1,291.	7,749.
	5	Furnish engineering technical report of the per- formance of the prototype lens Delivery June 15, 1955		528.
24372	1	Provide necessary engineering services to design & develop a scanning periscope as described in Projector Division Tech. Spec. #6 2/18/55 Delivery - July 1, 1955		44,119.
	2	Fabricate, test and delivery prototype of the scanning periscope designed under Item 1 Delivery - August 1, 1955		29,515.
	3	Fabricate, test and delivery 20 scanning periscopes similar to the prototype built under Item 2 but modified as indicated by results of prototype tests Delivery - 2 9/15/55 2 11/1/55 1 10/1/55 Balance of 15 at rate of 2/mo. starting 12/1/55	12,918.80	258,376.
	4	Spare parts to be provided in 4 kits, each kit con- taining parts for 5 periscopes including a set of special tools, gauges, etc. Delivery - 1 9/15/55 1 3/1/56 1 12/1/55 1 5/1/56		22,781.

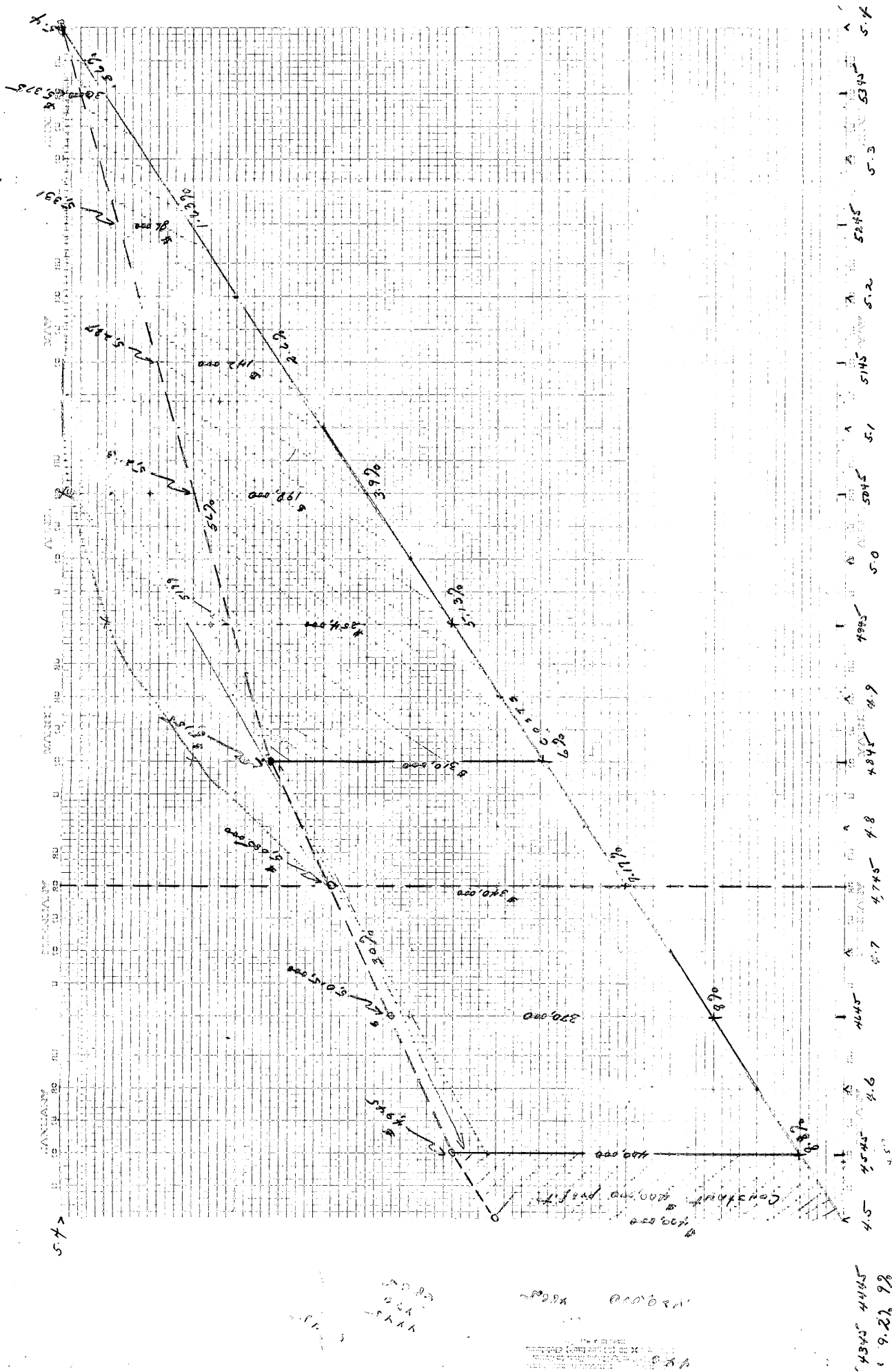
SPO NO.	ITEM NO.	DESCRIPTION	UNIT SELLING PRICE	ITEM SELLING PRICE
24390	1	Provide engineering services to design and develop a mechanical computer as described in Projector Division Tech. Spec. #7 4/20/55		131,584.
		Delivery - August 1, 1955		
	2	Fabricate, test & deliver one prototype and five computers designed under Item 1		127,687.
		Delivery - Prototype August 1, 1955		
		1 1/1/56 1 3/1/56		
		1 2/1/56 2 4/1/56		
	3	Provide 5 kits of spare parts, service & operating instructions. Each kit to contain spare parts for 1 complete computer and special tools & gauges as required plus a small complement of standard tools.		17,718.
		Delivery - One kit with each computer		
24408	1	Provide engineering services to test 85 24" f/6 lenses and select 50, and prepare a technical report on the performance of those selected in accordance with Projector Division Tech Spec. #5 2/21/55		31,134.
		Delivery June 1, 1955		
	2	Provide necessary services to disassemble, rework the optical elements and reassemble the 50 selected lenses, test & calibrate the selected lenses		19,958.
		Delivery - 6 8/1/55 10 10/1/55		
		8 9/1/55 10 per month to a total of 50		
	3	Provide necessary services to test, select and rework the required number of red & yellow filters for the 50 selected lenses		5,505.
		Delivery - With lenses		
24424	1	Provide necessary engineering services to design & develop a 24" f/8 lens, per Projector Division Technical Spec. #8 2/23/55.		6,200.
		Delivery - July 1, 1955		
	2	Fabricate, test & deliver prototype of 24" f/8 designed under Item 1		9,078.
		Delivery - September 1, 1955		
	3	Glass & Tooling		115,182.

SPO NO.	ITEM NO.	DESCRIPTION	UNIT SELLING PRICE	ITEM SELLING PRICE
24424 (cont)	4	Fabricate, test & deliver 51 lenses in test barrels and 3 less the test barrels & cells similar to phototype built under Item 2 but modified, if necessary, as indicated by results of prototype tests		48,536.
		Delivery - 11 8/15/55 Balance to be delivered at rate of 11/mo starting September, 1955		
	5	Furnish engineering technical report describing performance of prototype lens		528.
		Delivery - July 22, 1955		
24446	1	Purchase required material and tooling, both optical & mechanical, for fabrication of 31 fused quartz mirrors and their mounts		27,785.
		Delivery - July 1, 1955		
	2	Provide engineering service to study & design the required mirrors & mounts		23,293.
		Delivery - July 1, 1955		
	3	Fabricate & deliver 6 19" O.D., 6 17" O.D., 7 18.5" O.D., 6 6" O.D., and 6 8" O.D. fused quartz mirrors and mounts		67,137.
		Delivery - 1 each of all mirrors & Mounts 8-15-55, 10/15/55, 11/15/55, 12/15/55, 1/15/56, 2/15/56.		
23970	1	Provide project coordination services covering all aspects of work involved so as to insure satisfactory performance of the contract		120,232.
		To be billed monthly		
()	1	Optics & mounts for Configuration C*		180,000.*
()	1	Design & fabrication of required test equipment*		100,000.*
24264	1	Preliminary systems planning & engineering from 12-1-54 to 1-31-55 by Hycon Mfg. Co.		25,763.
24329	1	Hycon - Reference their proposals of March 4, 8, & 25, 1955. Provide for required systems engineering on all phases of the program		72,338.
	2	Provide engineering & manufacturing facilities to design & produce first unit of Configuration A-1		154,897.
		Delivery - July 31, 1955		

SPO NO.	ITEM NO.	DESCRIPTION	UNIT SELLING PRICE	ITEM SELLING PRICE
24329 (cont)	3	Fabricate, test & deliver 8 additional units of Configuration A-1		351,407.
		Delivery - 1 10-1-55 1 2/1/56 1 11/1/55 1 3/1/56 1 12/1/55 1 4/1/56 1 1/1/56 1 5/1/56		
	4	Provide engineering & manufacturing facilities to design & produce the first unit of Configuration A-2		41,641.
		Delivery - 9-1-55		
	5	Fabricate, test & deliver 8 additional units of Configuration A-2 - Delivery Same as Item 3.		254,505.
	6	Provide spare parts for Configuration A-1 & A-2 in accordance with Hycon Mfg. Co. proposal 3-4-55.		230,238.
		Delivery - With delivery of each configuration.		
	7	Provide engineering services to design & develop the required equipment for Configuration B		113,591.
		Delivery - July 30, 1955		
	8	Fabricate, test & deliver first unit of Configuration B developed under Item 7		111,515.
		Delivery - October 1, 1955		
	9	Fabricate, test & deliver 4 additional units of Configuration B		440,214.
		Delivery - 1 1/1/56 1 3/1/56 1 2/1/56 1 4/1/56		
	10	Provide spare parts for Configuration B in accordance with Hycon Mfg. Co. proposal 3-4-55.		238,558.
		Delivery - with delivery of each configuration		
	11	Provide engineering services to design & develop the required equipment for Configuration C *		173,040.*
		Delivery - July 30, 1955		
	12	Fabricate, test & deliver the first unit of Configuration C developed under Item 11. *		173,251.*
		Delivery - January 15, 1956.		

SPO NO.	ITEM NO.	DESCRIPTION	UNIT SELLING PRICE	ITEM SELLING PRICE
24329 (cont)	13	Fabricate, test & deliver 4 additional units of Configuration C*		690,226.*
		Delivery - 1 4/1/45 1 6/1/56 1 5/1/56 1 7/1/56		
	14	Provide spare parts for Configuration C in ac- cordance with proposal of Hycon Mfg. Co. 3-4-55.*		219,286.*
		Delivery - with delivery of each configuration		
	15	Provide 3 sets of ground handling equipment in accordance with Hycon Mfg. Co. proposal 3-4-55. *		576,407.*
		Delivery - 1 set October 1, 1955 1 set January 1, 1956 1 set March 1, 1956		
	16	Provide 5 sets of Technical data & instruction manuals of good commercial quality in accordance with Hycon Mfg. Co. proposal 3-4-55.		60,268.

* To be negotiated



**Summary Cost Proposal
International Survey Corp.**

	<u>Work done at Hycon</u>	<u>Work done at Peco</u>	<u>Total</u>
Purchased material and subcontract work	\$3,631,169.00 *	\$ 701,282.00	\$4,332,451.00
Labor & Overhead		921,644.50	921,644.50
Total Prime Costs	\$3,631,169.00	\$1,622,926.50	\$5,254,095.50
General & Administrative & Selling Exp. @ 13%		(1,319,302.00) 210,970.50	210,970.50
General & Administrative Expense @ 3%	108,936.00	(171,574.00)	108,936.00
Total Costs Target **	\$3,740,105.00	\$1,833,897.00	\$5,574,002.00
Profit @ 12%		220,071.00	220,071.00
Profit @ 5%	187,040.00	(178,965.00)	187,040.00
Total Price	\$3,927,145.00	\$2,053,968.00	\$5,981,113.00
		(1,670,341.00) #383,627 -	

* Cost proposal received from Hycon is as follows:

Direct costs, labor material & overhead	\$3,084,581.00
General & Admin. Exp. @ 8%	246,766.00
Total Cost	\$3,331,347.00
Profit @ 9%	299,822.00
Price to Peco	\$3,631,169.00

An incentive clause will be incorporated in Peco subcontract to Hycon permitting Hycon to retain 20% of all savings from the target cost of \$3,331,347, subject to redefinition and re-estimating on certain items.

** Customer will incorporate in Peco prime contract an incentive clause permitting Peco to retain 20% of all savings against target cost of \$1,833,997 on work done at Peco and 15% of all savings against a target cost of \$3,740,105 on work done at Hycon.

5981113
3631169
2349944

3631
533 Ground Handling equip
 3,098 new 1kg can Price

3098
3
 9294

3098
93
 3,191
1491
 4682
673

4682
315
 4997

14046
 32974
 28092
3150986

1645
213
 1858
12

4745
3100
 1645
13
 4931
1645
 21285

Perkin-Elmer Quote as of: 3-2-55

(9)

Order 1 (24033) windows

Item	Description	Price
1	Glass strength Investigation	\$ 4,200
2	Purchases of glass A-Lenses	45,000
3	99 windows (Configuration A)	12,500 (est)
4	55 windows (Configuration B)	11,000 (est)
5	21 windows (Configuration C)	10,500 (est)
6	Supervision of installation	500
		<u>83,700</u>

113,381

Order 2 (24136) Charting Cameras

1.	Design, Engr. and 1st prototype	\$103,000
2-21	20 cameras @ \$12,500	250,000
		<u>\$353,000</u>

402,999

Order 3 (24211) Lens Test Device

1	Design and construction	\$16,500
2	Report of Performance	4,500
		<u>\$21,000</u>

16,463

Order 4 (24293) 36" f/10 for B

1	Design	\$10,000 (est)
2	Prototype	5,000 (est)
3	6 Lenses	25,000 (est)
4	Report	n/c
		<u>\$40,000 (est)</u>

72,289

Order 5 (24372) Periscopes

1	Design	\$12,000 (est)
2	Prototype	35,000 (est)
3	Construct 20 @ \$16,000	320,000
		<u>\$373,000 (est)</u>

384,791

Order 6 (24390) Computer

1	Design	\$10,000 (est)
2	Prototype	10,000 (est)
3	Construct 6 @ \$3,000	18,000 (est)
		<u>\$38,000 (est)</u>

126,989

Order 7 (24408) Rework 24" f/6.3 lens

1	Test 85 lenses @ \$100	\$8,500 (est)
2	Rework lenses (40) @ \$300	12,000 (est)
3	Rework filters (80) @ \$100	8,000 (est)
		<u>\$28,500</u>

56,882

Order 8 (24424) New 24" f/8 lens

1	Design	\$3,000 (est)
2	Construct Prototype	5,000 (est)
3	Produce 50 lenses @ \$2,000	100,000 (est)
		<u>\$108,000 (est)</u>

118,000

Order 9 (24446) Large Mirrors

- ✓ 1 Order for Material
- 2 Manufacture of mirrors (60) 35

Quotes not received

110,205 \$ 60,000 (est)
50,000 (est)

Order 10 (No number yet) Optics & mounts for C

- ✓ 1 Design of mounts
- 2 Manufacture of prototype
- 3 Manufacture of 6 units @ \$20,000

20,000 (est)
40,000 (est)
120,000 (est)
180,000 (est)

Order 11 (24257) JGB

No estimate yet

59,500 \$60,000 (est)

Order 12 (No number yet) Optical test equipment

100,000 \$100,000 (est)

19,33,236 1,078,204

120,232

2,053,868

2,8922
Prof. H. A. Simon

1474 714
120 232
2500 5000
1,600,000
3,631,169
5231,129

2052503
494 1100
579,250

Rework of Hycon quote - 3-8-55 - RMS
(3 zeros omitted) *

Order 1

Preliminary Systems Planning
December 1 to Jan. 31, 1955

26,000

Order 2

Systems Engineering through flight test of
first article including travel

70,000

Order 3 - Configuration A

	Modification of Existing Equipment	Qty Req.	* 1st Art	* Prod.	* Prod Lot	* Total
1.2.1.1	K-38 Camera bodies and lens covers	36+4	15,	3,6	140	155
1.2.2.1	Spare shutters	100		,250		25
1.2.1.2	6" lens & shutter spare shutters	27 (14) 81	15,	3, ,200		93 16
1.2.3.1	A&B Magazine for K38	72	8,6	,875		70
1.2.3.3	A&B Magazine for K17C	54	11,5	1,250		129
1.2.4.1	Indexing mt for A1 K38	9	40	15		160
1.2.4.3	Fixed mt. for A2, 3-K38	9	12	8		76
1.2.4.7	Fixed mt. for A1, 3-K17C	9	13	1,2		23
1.2.5.1	Programmer	18+2	20	3		77
1.2.7	Assembly & system					
	Test A-1	9	22	7,5		82
	Test A-2	9	10	7,0		66
1.2.7.1	Shipping containers	18	11	4,8		93
1.3.7	Spare spools 320-6") 405-24")					5
						1020

Item 1 First A-1

2-9 8 additional A-1 @ \$46,750.

161,600

390,400

Item 10 First A-2 (after first A-1)

11-18 8 additional A-2 @ \$36,300.

143,200

289,900

Item 19 Spares

131,900

1,020,000

Item 20 24 f/8

156,500

1,176,600

Hycon recommendation of additional spares

138,500

1,315,100

Order 4

Configuration B

Item 1 1st B

2-3-4-5 B's @ \$106,300.

6 spares

\$217,800

425,100

169,000

\$811,900

Order 5

Configuration C

Item 1 1st C

2-3-4-5 C's @ \$172,250

6 spares

\$339,100

688,900

235,800

\$1,263,800

Order 6

Ground Handling Equipment

Item 1 1st set with 3 advanced base sets

2-3 Sets with 3 advance B sets @ 153,900

forward for 22,000
22,000

\$201,300

327,800

\$512,100

132,000

300,100

Order 7

Technical Data & Instruction Manuals

74,000

Hycon Total

\$4,072,900

1,400,000

\$550,100

4072900

12229

4072900

12229

4072900

4196

2106

11806

5000

5000

240

1000

2261800

7365100

1000

1000